

 When should I do standard CPR with *mouth-to-mouth breathing?* 

A Conventional CPR remains appropriate for respiratory arrest, which in most cases is caused by drug overdose, alcohol intoxication, carbon monoxide poisoning, a severe asthma attack, drowning, or choking. In cases such as these the primary

problem is not the heart stopping but a lack of oxygen (suffocation) that eventually leads to cardiac arrest. The breathing stops before the heart stops pumping. Keep in mind

that cardiac arrest is a great deal more common than respiratory arrest at home, in public, and in the workplace. In a respiratory arrest the collapse is neither sudden nor unexpected! If a person suddenly collapses in the workplace, it is because of a cardiac arrest in most cases.

For cases of respiratory arrest as listed above or unresponsiveness in young children (age 8 or under), follow conventional CPR (2 mouth-to-mouth ventilations followed by 30 chest compressions). However, even in these cases, Continuous Chest Compression CPR is better than doing nothing. If you can't or don't know how to do CPR with mouth-to-mouth, DO continuous chest compressions.

# **Q** What is the liability?

A Any person who tries to help a cardiac arrest victim is protected against liability under the Good Samaritan Law that exists in every state. In Arizona it is Arizona Revised Statute (ARS) 36-2263.

# **Q** Do I need a manikin to learn? How can I practice chest compressions?

A No you do not need a manikin to learn. If a training manikin is available, it can be used with or without a device that coaches you on the proper rate and depth of chest compressions, such as a PocketCPR®. If no manikin is available, you can use a sturdy pillow to practice and teach your family and friends. For more information on PocketCPR® with continuous chest compression CPR voice commands, call (602) 317-6595.

### CARDIAC ARREST AND CHEST COMPRESSION CHECKLIST:

1 Assess the patient – Conscious? NO Responsive? NO

2 Respond to Sternal Rub? NO

Start chest compressions while shouting "You, call 911 and someone

bring an AED if there is one here."

Continue chest compressions until AED or emergency medical people arrive. Remember to take turns when you tire if others are nearby.

#### **REMEMBER:**

**At all times**, someone is either performing **chest compressions** or doing what an **AED** is instructing them to do. Your hands are their heart!









- 1 View 9 minute video.
- Use the following Q & A's to help answer questions.
- **3** Encourage all trainees to teach their families and friends how to do CCC-CPR.
- Report your training at www.azshare.gov. Go to Info for Businesses.

# It's That Easy!

Thank You For Helping Save Lives In Arizona!

For more information: www.azshare.gov









More than 300,000 people die of sudden cardiac arrest each year in the USA. A victim of cardiac arrest has very little chance of survival unless **YOU**, the bystander, take immediate action to sustain him or her until emergency services arrive.

**Q** What is cardiac arrest? Is it a heart attack?

A Cardiac arrest and heart attack are not the same thing. Cardiac arrest means the heart is no longer pumping blood through the body. The victim is unconscious. If not immediately helped the victim will most probably die. A heart attack can cause a cardiac arrest, but there are also other causes. A cardiac arrest can happen to anyone, any age, with or without medical problems and often without any symptoms. The heart just stops beating. What you need to remember is that regardless of what caused the cardiac arrest or how old the person is – rapid treatment is the key to survival. For every minute that passes after a victim suffers a cardiac arrest their chances of survival decrease by about 10%. At 10 minutes after collapse their chance of survival is practically zero. In most cases,

paramedics just can't respond and arrive at the patient's side quickly enough for the patient's sake. YOU are a vital link in the chain of survival for that person.

### **Q** How do I recognize a cardiac arrest?

A cardiac arrest is an unexpected collapse of an individual who is not responsive. *Do not waste time trying to determine whether the person has a pulse.* The person could either not be breathing or could be breathing abnormally, also described as gasping, snoring, snorting, gurgling, or noisy breathing. Shake their shoulders and shout, "Are you all right?" If there is no response you might want to forcefully rub the breastbone with your knuckles, as instructed in the enclosed video to further assess for unresponsiveness.

# **Q** What should I do?

www.azshare.gov

A Direct someone to call 9-1-1 or make the call yourself. Call for an Automated External Defibrillator (AED), see below, in case one is nearby. Immediately begin continuous chest compressions by positioning patient on the floor/ground (not in a soft bed!), face up. Place the heel of one hand on the center of the chest with the heel of the other hand on top of the first. Lock your elbows so that your arms are straight. Position your shoulders directly above the center of the patient's chest and fall so that the weight of your upper body compresses the patient's chest. Perform fast, forceful chest compressions at about 100/min, compressing the chest 1.5 to 2 in. Lift pressure slightly after each compression to allow the chest to recoil. If it helps, hum the Bee Gees hit "Staying Alive" in your head – it helps you keep the correct speed and rhythm! If another bystander

is present, take turns performing chest compressions until the paramedics arrive. If by yourself, rest briefly when you tire. Although very important, chest compressions alone will not restore a heartbeat. An electric shock from an AED may be necessary. If an AED is available, have someone retrieve it and switch it on.

However, until an AED or emergency services arrive, chest compressions are the only means to move blood through the patient's brain, heart, and other organs. Your hands are their heart!

**Q** When should I stop?

A When either the patient or the paramedics tell you to stop or you are too tired to continue. However, do not stop pressing on the chest if the patient begins to gasp, opens his or her eyes, or briefly moves, because these may be signs that you are doing a proper job, not that the patient has recovered.

**Q** Can I harm the patient?

A You cannot make a patient any worse than he or she already is. Ribs can be broken, but the alternative is almost certainly death.

**What is an AED?** 

An Automated External Defibrillator (AED) is a smart machine designed to detect whether a cardiac arrest victim would benefit from a defibrillation shock and to instruct the operator to perform all steps of resuscitation until paramedics arrive. An AED is simple and safe to use. If you have an AED at your business, you may want to take the simple training in how to use it.

nay a vendor

www.azshare.gov

The heart has an electrical system that tells it to pump and a mechanical system that responds by squeezing. The AED is designed to analyze the heart rhythm and allow a shock delivered to those patients whose electrical system is malfunctioning in a rhythm called ventricular fibrillation. This rhythm is a chaotic quivering of the heart and is the most frequent rhythm initially in a cardiac arrest. By delivering a shock this chaos is stopped so the heart's natural pacemaker can resume a regular rhythm, once again pumping blood around the body. If the victim is not in ventricular fibrillation the AED will instruct you to perform chest compressions. Don't worry about having to make the decision to shock, the AED instructs you every step of the way and won't let you shock unless it is necessary.

## Why no mouth-to-mouth breathing?

By Gordon A. Ewy, MD, Professor and Chief of Cardiology, The University of Arizona College of Medicine, and Director, Sarver Heart Center

Individuals who collapse in sudden cardiac arrest were breathing normally just seconds before and have oxygen in their lungs, heart and arteries but it does them no good because their blood is not being circulated. The bystander has to take over the role of the heart by performing continuous chest compressions to pump blood to the brain and the rest of the body. During cardiac arrest, **your hands are their heart!** 

In the past, mouth-to-mouth breathing was one of the recommended first steps, which alone prevented many from beginning bystander resuscitation efforts. It was then learned that in early cardiac arrest, mouth-to-mouth breathing is not only unnecessary, but harmful, as it decreases resuscitation effectiveness and takes valuable time away from continuous chest compressions.

Patients in cardiac arrest have enough oxygen in their blood to sustain them for several minutes, and if they are gasping before and/or with chest compressions (indicating that one is doing a good job) there is enough oxygen to last over half an hour of continuous chest compressions!

Even if a second person is present, breathing for the individual is not recommended. The second person should trade off chest compressions about every minute, because compressing the chest hard and fast is very exhausting.